Using blueprinting and benchmarking to identify marketing resources that help co-create customer value

Arnela Ceric a, Steven D’Alessandro a,⁎, Geoff Soutar b, Lester Johnson c

a School of Management and Marketing, Charles Sturt University, New South Wales 2795, Australia
b UWA Business School, The University of Western Australia (M263), 35 Stirling Highway, Crawley, WA 6009, Australia
c Swinburne Business School, Swinburne University of Technology, Hawthorn, Victoria 3122, Australia

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ABSTRACT

Resource based theory (RBT), also known as the resource-based view, emphasizes resources as essential for building organizational competitive advantage. However, which competencies are essential for enhancing customer value remains unclear. Blueprinting and benchmarking are applied in this paper to demonstrate the process of identifying resources that are specific to co-creating customer value. This has important implications for the management of key marketing resources. Based on the case study results, application of the proposed methods suggests a new avenue for extending RBT application to the area of service management and in the development of service offerings.

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1. Introduction

All indicators point to the fact that the pace of services and services innovation will continue to accelerate in the future (Spohrer & Maglio, 2008). Organizations often rely on services to improve customer value, and ultimately, organizational performance. However, organizations have also begun to realize that service value creation occurs in interaction with customers (Grönroos, 2011; Ramaswamy, 2009) and that service is also offered through resources and capabilities, often intangible ones (Ramaswamy, 2009). There is a need to identify and continually develop those resources and capabilities that are essential for both the improvement of organizational performance and the creation of competitive advantage.

Resource based theory (RBT) (Barney, 2014; Kozenkova, Samaha, & Palmatier, 2014) or otherwise known as the resource based view (RBV) of the firm, posits that resources and capabilities are essential for creating competitive advantage and improving organizational performance (Barney, 1991; Hunt, 1997, 2011). Zubac, Hubbard, and Johnson (2010) develop a framework to show how managers can use a firm’s resources to create customer value. Several researchers examine the relationship between organizational performance and marketing resources and capabilities, such as market orientation (Narver & Slater, 1990) marketing planning capability (Slotegraaf & Dickson, 2004) and market knowledge competence (Li & Calantone, 1998). Different researchers identify different resources and capabilities as essential for organizational performance and competitive advantage. However, organizations are different from one another, and services they offer a unique nature and characteristics. Services are intangible, heterogeneous, inseparable and perishable (Johne & Storey, 1998). A method is required that can identify key resources and capabilities specific to an individual organization and its services. The RBV/RBT approach by itself cannot identify the specific resources and capabilities that lead to competitive advantage (Hinterhuber, 2013).

This paper addresses this gap in the RBT literature by demonstrating the use of service blueprinting (Bitner, Ostrom, & Morgan, 2008; Milton & Johnson, 2012) and benchmarking (Bissett & Buchan, 2006; Madritsch, 2009; Paladino, 2007; Wang & Lo, 2003) in identifying resources and capabilities that improve customer value and organizational performance in an Australian organization. First, RBT is discussed and the way it contributes to service delivery management. Second, an explanation of how service blueprinting and benchmarking can be used to identify the resources and capabilities that might improve customer value is presented and finally an industry example is provided to show how blueprinting and benchmarking can be applied in this way.

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and managerial implications and suggestions for further research are then outlined.

2. Literature review

2.1. Resource based theory

Resource-based theory seeks to explain the sources and conditions that create a sustained competitive advantage. It originates from strategic management (Barney, 1986a; 1991; Peteraf, 1993) and is now a dominant framework in international business (Peng, 2001), human resource management (Colbert, 2004; Saá-Pérez & García-Falcón, 2002; Wright, Dunford, & Snell, 2001), logistics (Lai, 2004), information technology (Bharadwaj, 2000; Mathwick, Malhotra, & Rigdon, 2001; Melville, Kraemer, & Gurbaxani, 2004; Wade & Hulland, 2004) and marketing (Day, 2014; Kozlenkova et al., 2014; Maklan & Knox, 2009).

RBT considers resources to be a source of organizational competitive advantage, a relationship that is empirically confirmed (Hitt, Birnang, Shimizu, & Kochhar, 2001; Huselid, Jackson, & Schuler, 1997; Robins & Wiersema, 1995; Wernerfelt, 1995). Although an organization can be considered as a collection of physical, human and organizational resources (Barney, 1991), RBT suggests that only strategic resources lead to competitive advantage. For a resource to be strategic it must be valuable, rare, non-imitable and non-substitutable (Barney, 1991). A resource is valuable when it can improve organizational effectiveness and efficiency. Rarity means that only a few current and potential competitors have access to that resource. A resource is non-imitable when competitors cannot obtain, imitate, purchase or duplicate that resource. This often occurs when competitors cannot identify the factors that lead to success due to unique historical conditions, path dependencies (resources need to pass through time dependent stages to create the advantage), causal ambiguity (difficulty in identifying how an advantage was created) or social complexity (based on interactions of multiple resources) (Barney, 1991). Non-substitutability means that there are no strategically equivalent resources (i.e., substitutes). If any of these conditions are missing, a resource is not strategic and cannot provide a sustainable competitive advantage.

The other important aspect of RBT theory is capabilities, which are particularly relevant in facilitating the use of resources in the market place (Day, 1994; Hooley, Broderick, & Möller, 1998). Capabilities are a “complex bundle of skills and accumulated knowledge that enable firms to coordinate activities and make use of their assets” (Day, 1994, pp. 38). Developing competencies requires an extended learning curve in understanding the market and developing managerial skills (Hooley, Greenley, Fahy, & Cadogan, 2001). Organizational change, such as altering an organizational culture, may also be necessary for the development of competencies and the alignment of an organization with market requirements (Hooley et al., 1999).

Day (1994) classifies marketing capabilities into three groups based on their internal or external organizational focus. Inside-out capabilities are related to core organizational processes that create economic value (e.g., financial management, cost control, integrated logistics, human resource management, manufacturing/ transformation processes and technology development). These internal resources and capabilities are “activated by market requirements, competitive challenges, and external opportunities” (Day, 1994, pp. 41). Their value emerges only when used to exploit external opportunities. Outside-in capabilities help an organization understand their customers’ evolving requirements and respond to them (e.g., market sensing, customer linking, channel bonding and technology monitoring). Their purpose is “to connect the processes that define the other organizational capabilities to the external environment and enable the business to compete by anticipating market requirements ahead of competitors and creating durable relationships with customers, channel members and suppliers” (Day, 1994, pp. 41). Spanning capabilities integrate inside-out and outside-in capabilities with a focus on satisfying customer needs (e.g., customer order fulfillment, pricing, purchasing, customer service delivery, new product/service development and strategy development). They require an understanding of market requirements and internal competencies. The combined effects of the three groups of capabilities create causal ambiguity and complexity, so they are not imitable and can provide sustained competitive advantage.

Hooley and his colleagues provide some useful applications of RBT to marketing strategy (Hooley et al., 2005; Hooley et al., 1999; Hooley et al., 1998). Capabilities and resources are classifiable according to whether they provide outside-in and inside-out competitive advantages at an operational level. Hooley et al. (1998, pp. 102) see outside-in capabilities as a firm’s ability to understand its customers and make links with them (i.e., market sensing skills). Examples include benchmarking performance, positioning offering, providing superior value (Priem & Butler, 2001; Zubac et al., 2010) and better service to consumers (Hooley et al., 1998). Inside-out capabilities, on the other hand, are a firm’s internal capabilities. This includes the redeployment of employees to provide better and more productive customer service. Examples include the use of service blueprinting, the continuous improvement of manufacturing and distribution and relationship marketing.

Research finds support for the relationship between the use of the type of capabilities and performance. Hooley, Greenley, Cadogan, and Fahy (2005) find that market performance is influenced, in part, by ‘outside-in’ capabilities (customer linking capacity), although they do not consider ‘outside-in’ capabilities. For service organizations, both types of capabilities need consideration concurrently, as the impact of a firm’s operations is much greater for services than in goods-based organizations. A useful way that this can be examined is through a mixed-method case study approach that addresses how the two types of capabilities are formed and how they influence performance.

Firm performance, it is argued, is improved if RBT is successfully applied. Hooley et al. (1999) report that with European firms that deploy an RBT focus, there is better competitive performance, a finding mirrored by information technology researchers such as Bharadwaj (2000). Management researchers such as Hitt et al. (2001) find that human capital strategies have a much greater impact on professional service-firms if an RBT approach is used. Customer performance outcomes such as satisfaction, benefit from the application of RBT, and these outcomes predict greater firm performance (Wang & Lo, 2003).

In marketing, the RBT approach is beneficial in improving sales (Menguc & Barker, 2005), logistics (Ellinger, Ketchen, Hult, Elmadag, & Richey, 2008), export performance (Tan & Sousa, 2015), innovation (Kozlenkova et al., 2014), brand and customer assets (Pergelova, Rialp, & Prior, 2011) and financial performance (Kozlenkova et al., 2014; Wernerfelt, 2014; Yu, Ramanathan, & Nath, 2014). Interestingly, Wernerfelt (2014), argues that for RBT to be effective, resources and/or capabilities that demonstrate performance must not only be identified, but that the focus should be on those that a firm possesses which are superior to (or is something that is better done) than the competition. This approach is very much the focus of this paper.

Organizations must have a suitable corporate culture if resources and capabilities are to be correctly deployed (Barney, 1986b). This leads Hooley et al. (1999) to suggest that resources and capabilities are hierarchical, starting with marketing culture at the top, then passing through marketing strategy to marketing operations, in which the deployment of outside-in and inside-out capabilities or processes occur. This sentiment can also be seen in Day’s (1994) suggestion that market-driven organizations need to have a clear focus on the external environment (more specifically, customers’ needs and competitors’ intentions). In other words, firms need to be market oriented if they are to deploy capabilities and resources successfully.

2.2. RBT and its contribution to services management

While there is emerging interest in the application of the RBT framework in marketing, its application in service management is still in its
infancy. Evanschitzky (2007) suggests that RBT is useful to help identify service networks’ market orientation. He also discusses the role resources play in creating competitive advantage. There is however, no clear method of identification of resources in this paper. Evanschitzky (2007), it can be argued, only focuses on a higher level of marketing resources and capabilities of organizational culture and orientation as suggested by Hooley et al. (1999), and does not provide a complete picture of how RBT can be used to explain service marketing success.

In their seminal paper Vargo and Lusch (2004, pp. 5) see the RBT as an important theoretical precursor for the development of the service dominant logic (SDL). In other words, proper application of SDL requires firms to apply a resource based theory. They stress also in their paper the importance of operand resources, especially physical and mental skills, as the fundamental unit of exchange between consumers and firms, and especially operand resources such as knowledge, as a source of competitive advantage. The correct paper provides a discussion of how the techniques of blueprinting help firms identify operand resources of human skill and processes and how benchmarking is an important means of identifying useful market knowledge or operand resources.

The other challenge in service management seems to be to find the key outcomes for which the resources identified by the RBT approach are appropriate and, most importantly, where they come from (Barney, 2014). Thus, for many service organizations, increasing consumers’ perceptions of value and service quality are key reasons for undertaking an RBT analysis. Such customer perceptions influence purchases and therefore firm performance (Aarikka-Stenroos & Jaakkola, 2012; Chatain, 2011; Timothy, Bruce, Lerzan, Tor, & Jay, 2007; Wang, 2010; Woodruff, 1997; Zeithaml, 1988).

Consumer value is most commonly defined as a trade-off between what consumers receive from a product or service and what they sacrifice (Ruiz, Gremler, Washburn, & Carrón, 2010; Sheth, Newman, & Gross, 1991; Sweeney & Soutar, 2001; Teas & Agarwal, 2000; Zeithaml, 1988). The measurement of value is through single utility or value for money index (Bolton & Drew, 1991; Cronin & Taylor, 1994; Hartline & Jones, 1996) and through multidimensional indexes (Sweeney & Soutar, 2001; Teas & Agarwal, 2000). Woodruff (1997) proposes a framework in which value derives from a customer’s learned perceptions, preferences and evaluations, while Holbrook (1999) and Ruiz et al. (2010) suggest that customer value should include service elements, such as service quality, service equity and relational benefits. From an RBT perspective, customer value depends on organizational resources and capabilities but, to better understand this construct, it is critical to identify the resources that affect it (Vargo, 2008, pp. 214). From an SDL perspective this means that firms as resource integrators, and through exchanges with customers or resource integrator beneficiaries, co-create value. This means that the perspective of value is dependent on the nature of the co-creation exchange, something captured quite well in blueprinting.

Service quality seems particularly relevant in creating and ensuring customer value. Zeithaml (1988, pp. 3), defines quality in general, as “a measurable and verifiable superiority on some predetermined ideal standard”. Parasuraman, Zeithaml and Berry (1988) and Parasuraman, Berry, and Zeithaml (1991), define service quality as a comparison between the expectations and performance of a service. On the other hand, Cronin and Taylor (1994) and Jain and Gupta (2004) argue that service quality is best measured simply as a perception of service performance.

Research using a widely accepted measure of service quality (SERVQUAL) suggests that this construct has a number of dimensions (e.g., tangibles, reliability, responsiveness, assurance and empathy). The issue for many service providers is that, in different industries and for different customers, the importance of these dimensions may vary. Carman (1990) examines four service industries (a dental school-patient clinic, a business school placement center, a tire store and an acute care hospital) and finds that consumers in each case place an emphasis on different service quality dimensions. Customer characteristics such as gender may also affect service quality perceptions. Yelkur and Chakrabarty (2006), for example, report that women have higher expectations with respect to tangibles, reliability, responsiveness and empathy in the provision of take away food services than men. Based on identified issues with service quality, it seems reasonable to assume that the identification and focus on the resources that are critical to creating and delivering customer value may be fruitful for service management. Service blueprinting provides an important means of identifying these relevant resources, such as an outside-in capability. Both this outside-in and the inside-out capability of market sensing or benchmarking are important for service organizations.

2.3. Service blueprinting and RBT

Service blueprinting allows the mapping of organizational internal processes and contacts with customers. As such, it focuses on inside-out capabilities. A service blueprinting map can be used to tell a story about each activity and capability in the process, their sequence, their connections with other activities and capabilities (i.e., the transfer of information), as well as potential issues. More specifically, such a map is used to indicate which resources are being used in each activity, when, to what extent, and for what purpose. Organizations can also distinguish between the key competencies that need to be sustained, those that need urgent action as they may be being done poorly, and those that are not critical. As noted previously, the application of SDL and therefore RBT, requires an identification of operand resources, such as people, skills and processes (Vargo & Lusch, 2004, pp. 3) and service blueprinting can very much assist in this process.

Service blueprinting is a process design method that visually captures the complete service process, including organizational structure, all relevant actors, and their activities from a customer point of view (Bittner et al., 2008). It reflects the service management assumption that organizations need to engage with customers to create value. Shostack (1984) first introduced service blueprinting and the process has four steps (i.e., identifying the processes, isolating fail points, establishing a time-frame for the service, and analyzing profitability). The method was further developed by Kingman-Brundage (1989, 1991, 1993), who emphasized the benefits of blueprinting in identifying bottlenecks or fail points in the service process. Kingman-Brundage, George, and Bowen (1995) suggest that service blueprinting takes employees, customer and technical logic into account, thereby integrating the service process. Employee logic clearly identifies employees’ roles, responsibilities and performance, while customer logic focuses on customers’ behavior and goals. Technical logic relates to the principles that govern the service process. Understanding employees’ and customers’ roles enables managers to determine the activities and resources needed in each stage of the service delivery process.

In addition, service blueprinting identifies the resources necessary to prepare and serve customers in each stage of the service process. Service blueprinting thus provides additional information that is useful to enhance the value creation process. Knowing what customers’ value helps managers allocate resources to address customers’ needs (Kingman-Brundage et al., 1995), suggesting an alignment between service blueprinting and the RBT. Such an alignment can overcome the RBT’s shortcomings and increase the importance of service blueprinting in supporting the value proposition offered to customers.

2.4. Benchmarking and RBT

While service blueprinting can be useful for improving internal processes and identifying inside-out resources and capabilities, it cannot identify outside-in competitive resources and capabilities. Also from an SDL perspective, service blueprinting cannot by itself identify knowledge (operand) resources which provide a competitive advantage (Vargo & Lusch, 2004, pp. 9). Benchmarking is a tool for developing
outside-in capabilities, or operant resources, as it compares organizational aptitudes in relation to competitors’ aptitudes. Benchmarking can identify a gap between competitors’ and organizational capabilities and, hence, provide direction and targets for improvement. When combined, service blueprinting and benchmarking can provide important insights into the adequacy of organizational inside-out and outside-in capabilities in creating customer value.

Benchmarking can also provide guidelines for quality control for each part of the service process, which in turn can be modeled in a service blueprint, or what is in a service blueprint can be tested via benchmarking to see if it provides a competitive advantage.

Benchmarking often provides the identification of best practice (and therefore capabilities) for successful organizations, or by formalized accreditation processes, within which service delivery must meet defined and audited criteria, standards of audited service excellence. The adoption of successful benchmarking practices depends on management’s willingness to compare their performance with that of other similar organizations (Ammons & Rivenbark, 2008).

Bissett and Buchan (2006) and Madritsch (2009) note that benchmarking can help deliver lower costs and higher profits for services that can be standardized, such as construction and supply management. Examples of industry wide benchmarking or accreditation include International Standards Organization (see ISO, 2015) and Standards Australia (Standards Australia, 2015) or industry based accreditation schemes, such as EQUIS and AASCB in higher education. Some benchmarking example standards of are shown in Table 1.

### 3. Method

In order to demonstrate the means by which blueprinting and benchmarking are applicable to RBT in a service management context, a case study approach is used. A case study approach is successfully used in a number of studies which seek to examine the implementation of RBT to service management firms (Braganza, Stebbings, & Ngosi, 2013; Lillis & Szwejczewski, 2012; Luo, Fan, & Zhang, 2012; Menno, Jos van, & Ton van der, 2004). This is because such an approach allows researchers to examine strategic management processes and outcomes in a real life context. A case study approach also allows the application of RBT and its effects on performance to be studied over time, something missing from the myriad of cross-sectional studies in this area (Kozlenkova et al., 2014). A good example of how an organization can use blueprinting and benchmarking to identify competitive resources and capabilities is in the actions of a niche and start-up company in the Australian cell phone industry.

### 3.1. Research setting

**AusBargain** (which is not its real name in order to protect its identity), was founded in Europe before expanding to the Australian market. It uses service blueprinting to identify issues in cell phone contracts and the impact of local call centers in providing advice and support to customers. According to Euromonitor, there are more than 25 million mobile phone subscriptions in Australia as of 2011, more than one for each member of the Australian population (Euromonitor International, 2011). The industry in Australia is worth $20 billion annually (IBISWorld, 2012) and consumes 1.4% of household expenditure (Australian Bureau of Statistics, 2010). However, complaints to the Telecommunications Industry Ombudsman (TIO) were at 138,946 in 2013. Consumers identify three major sources of complaints; poor customer service (48%), problems with billing and payments (47%) and inadequate complaint handling (31%), (consumers could nominate more than one issue of the

### Table 1

Benchmarking standards used in industry.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Use</th>
<th>How it is measured</th>
<th>Implementing body</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 9001:2008</td>
<td>Implemented by over a million organizations in 176 countries ISO 9001:2008 is the standard that provides a set of standardized requirements for a quality management system. In particular: the customer’s quality requirements, and applicable regulatory requirements, while aiming to enhance customer satisfaction, and achieve continual improvement of its performance in pursuit of these objectives</td>
<td>The standard requires the organization itself to audit its ISO 9001:2008-based quality system to verify that it is managing its processes. In addition, the organization may invite its clients to audit the quality system. Lastly, the organization may engage the services of an independent quality system certification body to obtain an ISO 9001:2008 certificate of conformity.</td>
<td>Independent external quality system certification body.</td>
</tr>
<tr>
<td>Standards Australia – Emergency Health AS 4083-2010 Standard</td>
<td>Sets out the procedures for health care facilities in the planning for, and responses to, internal and external emergencies. EQUIS assesses universities as institutions as a whole. It assesses not just degree programs but all the activities and sub-units of the institution, including research, e-learning units, executive education provision and community outreach. Institutions must be primarily devoted to management education.</td>
<td>An overall report is provided to the body which must meet the following criteria: a) Industry environment b) Institutional status c) Governance d) Mission, vision and values e) Strategic position f) Strategic direction and objectives g) Strategic planning h) Quality assurance i) Internationalization j) Corporate connections</td>
<td>Independent external quality system certification body.</td>
</tr>
<tr>
<td>EQUIS (European Quality Improvement System)</td>
<td>European Market Performance Indicator (MPI)</td>
<td>European Market Performance Indicator (MPI) incorporates the consumer perceptions of trust: offer comparability; incidence of consumer problems and complaints and the extent to which consumer expectations were met. An overall report is provided about the conditions for each industry and market, for every member state of the European Union. Results from the MPI can also be used to compare the competitive conditions across countries, and the performance of firms within industries to national and international benchmarks can be considered. Uses performance metrics for internal operations related to business strategy implementation in the telecommunications sector. Benchmarking is based on site visits and survey research.</td>
<td>Independent external quality system certification body.</td>
</tr>
</tbody>
</table>

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3. The problems experienced and the degree to which they lead to complaints (Telecommunications Industry Ombudsman, 2014). This provides a challenging environment for AusBargain.

3.2. Benchmarking by AusBargain

The data for the benchmarking study comes from a longitudinal 11-month study of an online survey of 971 cell phone customers from a national consumer panel. In terms of switching providers over the 11-month period, 147 respondents, or 15% of the sample, had switched providers. 43%, did not switch but had considered switching, and 42% were not interested in switching. The sample matched the representativeness of the Australian population by state, gender and age group. This survey contains all the measures of benchmarking including value and satisfaction (quality of service) attitudes and the market performance indicator (MPI).

Importantly, the survey shows that of those who had switched providers previously, there were significant savings in costs of an average of $26.52 a month, which when extrapolated to the industry represented around 623 million dollars annually to Australian consumers. There is also a higher level of satisfaction with the new provider than with the previous provider. This points to the importance of changing providers (which was modeled in the service blueprint) as a key means of consumer finding value (mean of value perception = 22.60 for those who switched compared to a mean of 17.63, t = 18.65, p < 0.01), and achieving higher levels of satisfaction with the quality of the service (mean of satisfaction with current provider service = 12.07, when customers switch provider, compared to a mean of satisfaction with current provider for those customers who did not switch = 9.80, t = 16.95, p < 0.01). Note that Appendix 1 lists the composition of the measures of satisfaction and value.

Because of the longitudinal nature of the survey and its use in other countries, AusBargain, used the MPI (European Commission, 2010) to compare Australian competitive conditions with those in the European Economic Union (EEU). The MPI is a composite perceptual marketplace index that is designed to give a benchmark of market conditions in Australia with that of a number of countries in the EEU. AusBargain uses a longitudinal national survey to collect the required MPI data in Australia. As can be seen in Table 2, market conditions in Australia are worse than in the European Union, which may explain the high number of consumer complaints to industry and government bodies.

These results suggest that the Australian cell phone industry is not well regarded by consumers who, compared to their counterparts in Europe, see it as a market in which it is difficult to compare offers and which has less trustworthy providers that do not live up to expectations. Consequently, AusBargain uses service blueprinting to understand its service delivery and what customers value better.

3.3. Measurement of the quality of service and value perceptions

The measurement of quality and service quality perceptions is constructed using composite scores, based on PLS loadings from a previous study that examined mobile phone switching patterns (D’Alessandro, Johnson, Gray, & Carter, 2015). Their six-item reflective satisfaction with a current provider measure, which is based on research by Aydin and Özer (2005), follows Cronin and Taylor’s (1994) and Jain and Gupta’s (2004) suggestions. The three-item value measure of value is from Ruiz et al.’s (2010) study. As they suggest that this construct is formative, and is modeled in this way. Appendix 1 shows the details of the constructs. Given recent controversy in structural equation modeling research (see Davcik, 2014), we use PLS and also examine the discriminant validity of the measures of the constructs using Fornell and Larcker’s (1981) approach. The PLS analysis provides construct alpha scores, communality and construct reliability measures (for details see D’Alessandro et al., 2015, pp. 308).

3.4. Service blueprinting by AusBargain

AusBargain’s service blueprinting follows five steps. First, there is an identification of an important service process. The focus is on the process required to change cell phone providers, as this is associated with greater value and satisfaction for the consumer. Second, a flow chart of the service process from a customer’s view is developed. Third, front and back stage activities of the service process are included in the flowchart. As part of this step, there is first a delineation of the lines of exterior interaction with the customer, after which the whole firm’s service delivery process is detailed. This identifies the interior support activities that influence customers and front-office workers. The fifth and final step is to add the tangible evidence customers see or receives in the service delivery process.

The company also uses qualitative research (seven focus groups from different consumer segments) and a national survey research of 843 AusBargain and 971 other cell phone users to find out how important these aspects are to customers’ perceptions of value and quality.

Table 2

Benchmarking cell phone services in Australia with that of the EEU by AusBargain.

<table>
<thead>
<tr>
<th>Components of the MPI</th>
<th>Australian industry</th>
<th>AusBargain</th>
<th>European Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty of comparability of offers (0 = hard to compare)/10</td>
<td>5.60</td>
<td>5.37</td>
<td>6.90</td>
</tr>
<tr>
<td>Level of TRUST (0 = no trust)/10</td>
<td>4.07</td>
<td>4.10</td>
<td>6.10</td>
</tr>
<tr>
<td>Level of expectation (0 = no expectation)/10</td>
<td>5.22</td>
<td>5.79</td>
<td>7.30</td>
</tr>
<tr>
<td>Problems and complaints (10 = no problems/complaints)/10</td>
<td>7.22</td>
<td>7.58</td>
<td>8.60</td>
</tr>
<tr>
<td>The market performance indicator (MPI) average of the above/10</td>
<td>5.82</td>
<td>6.01</td>
<td>7.22</td>
</tr>
</tbody>
</table>

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The qualitative research finds that consumers are concerned about complex and detailed contracts and poor service. For the sake of brevity, two indicative quotes are:

*At the call center, they don’t care about my problems. At service provider Z it took 20 minutes to wait and speak to someone. And then (!) was palmed off to someone else. By the time I got to the right person, the kids needed me and I just had to hang up.*

* [Switcher, married with children >5 years of age]

*Let’s say I make 100 phone calls, each lasting ten minutes. How much is that going to cost me? Nobody can tell me.*

* [Switcher, married with children >5 years of age]

The survey identifies the factors that influence switching. The top reasons consumers switch or seriously consider switching mobile carriers are:

- Poor coverage (39%).
- Poor customer service (30%).
- They wanted a new handset (30%).
- They used their mobile phone more than anticipated and needed a new plan (22%).
- Friends and family were on a different network (17%).
- Their mobile was being used less than anticipated (17%).

In order to address these aspects of service quality, AusBargain identifies relevant resources and capabilities.

4. Results

An example of blueprinting can be seen in Fig. 1, which shows customer contact processes that are mapped as are back office and support services. This service blueprint also includes the customer activities that relate to the co-production of the service (i.e., visiting the website, activating the SIM card and contact with the call center).

Fig. 1 shows the service blueprint to identify important resources, such as the online activation system for prepaid SIM cards, call center support processes, account information processes and call center staff.

AusBargain uses the service blueprint to identify relevant inside-out capabilities for creating customer value. Two critical capabilities are contract flexibility and customer service, which leads AusBargain to consider a better online activation system for prepaid SIM cards, improved call center support, up-to-date account information and, finally, increased and empowered call center staff who can better assist consumers with difficulties.

AusBargain has simple cell phone contracts, based on SIM cards and not on more complex deals with handsets (a key capability). It also recognizes the importance of coverage and forms a partnership with Australia’s second largest telecommunications company. Partner relationships are an important outside-in capability and, in this case, ensures improved customer value. AusBargain also provides a lower call rate and flexible contracts, where customers can choose either a prepaid contract or a post-pay contract, in which they pay according to their use. Customers can change between the two types of contracts at any time using an App or the organization’s website.

In its first year in the Australian market, AusBargain performed well. Its offers are easily comparable with competitors and, as a result of increasing and empowering call center staff, the company increased its trustworthiness, became significantly better in dealing with customer complaints, and is more successful in encouraging customers to update their cell phones more often. Service blueprinting enables AusBargain to identify the resources and capabilities critical for creating customer value. As a result, the company positions itself well ahead of its competitors. It experienced growth of 25% in its SIM card sales to around 1.5 million users in its first two years and won a number of industry and customer satisfaction awards. As can be seen in Table 3, the company also has significantly higher service quality ($t = 30.94, p < .01$) and value ($t = 30.01, p < .01$) ratings than its competitors.

The use of blueprinting and benchmarking, coupled with relevant market research, enables AusBargain to identify critical inside-out and outside-in resources and capabilities, such as simpler, more straightforward and flexible SIM contracts, better customer service from their call center, and pricing products at a point at which customer value is perceived to be greater than is the case in the rest of the market. An independent market research company identifies AusBargain as having the highest levels of customer satisfaction in the mobile phone provider industry and AusBargain won a number of industry awards for customer satisfaction and its engagement with consumers.

AusBargain’s use of blueprinting and benchmarking suggests that niche players and market start-ups can use these approaches to identify the resources and capabilities that help inform their spanning capabilities and activities with almost immediate success. When industry practices are poor and service providers are untrustworthy and all the same, especially because of market power, there seems to be considerable pay-offs for a small player who can quickly identify and use critical resources to improve customer value.

5. Discussion and conclusions

The resource based theory has much to offer service management, as it helps focus practitioners on key aspects of their businesses and networks, which can provide a long-term competitive advantage. The critical aspect is to find the resources and capabilities that are most important for a specific organization. This paper suggests that service blueprinting and benchmarking are key methods for the implementation of the RBV, as they respectively target both ‘inside-out’ (operand) and ‘outside-in’ (operant) resources and capabilities. These approaches are particularly helpful in a market with poor industry practices. Blueprinting that provides assessment of organizational inside-out capabilities, and international and national benchmarking that provides information on outside-in capabilities seem particularly useful and are recommended by this and other service management studies (Aarikka-Stenroos & Jaakkola, 2012; Randall, Gravier, & Prybutok, 2011).

Service blueprinting and benchmarking provide service managers with a set of tools to identify the inside-out and outside-in capabilities critical to creating and delivering customer value. Ultimately, focusing on, investing in, maintaining and developing these critical resources and capabilities can lead to further innovations in service value and the creation of a sustainable competitive advantage. Focusing on RBT and its usability in creating customer value presents a new direction in service management research. Identifying and using the key resources and capabilities that create customer value is a necessary first step that can inform new approaches. Apart from a focus on value creation, RBT and service blueprinting can be used to assess service value and, consequently, to take appropriate action to improve service quality and overall service value. Benchmarking is a next step that many firms should consider in their attempts to determine the outside-in capabilities that provide customer value. Benchmarking is not only important in terms of identifying best internal practices but how these practices impact on consumers’ trust in their providers, which some researchers suggest is crucial for the co-creation of value (Randall et al., 2011).

The main issue when applying the RBT framework to services businesses is that, unlike firms that produce physical products, service organizations’ resources and capabilities are processes that co-create value with consumers. In other words, there is a partnership between consumers and providers who collectively co-create the value of the service (Lusch, Vargo, & O’Brien, 2007; Payne, Storbacka, & Frow, 2008; Vargo, Maglio, & Akaka, 2008), which is why blueprinting and benchmarking have great relevance to service businesses, as they identify the stages in which resources and capabilities are used in value creation. Through blueprinting and benchmarking, firms have a greater chance of

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identifying resources and capabilities that lead to the co-creation of value and to better managing these moments of truth (Spohrer & Maglio, 2008; Yazdanparast, Manuj, & Swartz, 2010). It seems that while competitive conditions and outcomes of benchmarking are important, so too are internal service delivery processes. Research into the application of RBT frameworks would gain much from an interdisciplinary approach, as such service engineering, logistics, strategic human resources management and operations science, as such approaches are likely to provide answers and directions for future practice.

No research is without its limitations and this study is no different. We only examine one company in a single industry context. Future research should replicate the suggested methods (service blueprinting and benchmarking) in other industries and in a number of companies to demonstrate their usefulness for identifying critical resources for creating customer value. However, this paper makes an important contribution by showing how the application of RBT in a service management context improves organizational performance and, most importantly, improves service quality and customer value. Future research should consider not only an internal analysis of service processes and best industry practices, but also how consumers' interactions with these processes create value for both parties (Payne et al., 2008).

Table 3
Mean quality of service and value perceptions of AusBargain compared to other Australian telecommunication providers.

<table>
<thead>
<tr>
<th>Components of the MPI</th>
<th>AusBargain</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with current provider</td>
<td>26.8***</td>
<td>18.1</td>
</tr>
<tr>
<td>Value of service provided</td>
<td>4.7**</td>
<td>3.5</td>
</tr>
</tbody>
</table>

(Note: *** difference significant at p < .01).

Fig. 1. A blueprint for changing cell phone providers. Source: Adapted from Bitner et al. (2008, pp. 76).
suggestions made here are a significant first step that demonstrate RBT’s applicability in service management contexts, and provide an important future research agenda.

Appendix 1

Table A1 Measures of satisfaction and value.

<table>
<thead>
<tr>
<th>Scale and items: weights (w) and loadings (L) of latent constructs where relevant</th>
<th>Measurement statistics</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cronbach’s alpha</td>
<td>Construct reliability</td>
</tr>
<tr>
<td>Satisfaction with current provider (6 items, reflective measure AVE = .80).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am happy with this company’s services (L = .95)</td>
<td>4.6 (1.6)</td>
<td></td>
</tr>
<tr>
<td>Overall, I am pleased with this company’s services (L = .95)</td>
<td>4.5 (1.6)</td>
<td></td>
</tr>
<tr>
<td>Using this company’s services is a satisfying experience (L = .92)</td>
<td>4.3 (1.6)</td>
<td></td>
</tr>
<tr>
<td>My choice to use this company was a wise one (L = .93)</td>
<td>4.6 (1.6)</td>
<td></td>
</tr>
<tr>
<td>Overall, I am dissatisfied with this company (L = .90)</td>
<td>4.4 (1.8)</td>
<td></td>
</tr>
<tr>
<td>I think I did the right thing in deciding to use this company for my service needs (L = .90).</td>
<td>4.6 (1.5)</td>
<td></td>
</tr>
<tr>
<td>Customer value of cell services (3 items, formative measure)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>The value I receive from this company’s services is worth the time, effort and money, I invested (w = .45)</td>
<td>3.3 (1.0)</td>
<td></td>
</tr>
<tr>
<td>The company provides good services for the price (w = .37)</td>
<td>3.3 (1.0)</td>
<td></td>
</tr>
<tr>
<td>This company offers good value for the price I pay (w = .25).</td>
<td>3.3 (1.1)</td>
<td></td>
</tr>
</tbody>
</table>

References


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